

AMENDMENTS TO THE CLAIMS

In the claims, please cancel claims 8, 17, 21, and 22.

1-4. (canceled)

5. (previously presented) A process for delivering a polynucleotide to the cytoplasm of a cell in vitro consisting of:

- a) forming a styrene-maleic anhydride random copolymer;
- b) increasing hydrophobicity of the copolymer by randomly attaching hydrophobic groups along the copolymer backbone in a sufficient amount to form a membrane active polyanion capable of lysing mammalian cell membranes at pH 6.5 wherein randomly attaching hydrophobic groups along the copolymer backbone consists of reacting hydrophobic amines or hydrophobic alcohols with anhydride monomers in the copolymer; and
- c) contacting said cell with said polynucleotide and said membrane active polyanion such that the polynucleotide and the membrane active polyanion are endocytosed by the cell.

6. (canceled)

7. (previously presented) The process of claim 5 wherein the hydrophobic amines consist of alkyl amines.

8-11. (canceled)

12. (previously presented) A process for delivering a polynucleotide to the cytoplasm of a cell in vitro consisting of:

- a) forming a butyl vinyl ether-maleic anhydride alternating copolymer;
- b) increasing hydrophobicity of the copolymer by randomly attaching hydrophobic groups along the copolymer backbone in a sufficient amount to form a membrane active polyanion capable of lysing mammalian cell membranes at pH 6.5 wherein randomly attaching hydrophobic groups along the copolymer backbone consists of reacting hydrophobic amines or hydrophobic alcohols with anhydride monomers in the copolymer; and
- c) contacting said cell with said polynucleotide and said membrane active polyanion such that the polynucleotide and the membrane active polyanion are endocytosed by the cell.

13.-15. (canceled)

16. (previously presented) The process of claim 12 wherein the hydrophobic amines consist of alkyl amines.

17-22. (canceled)